

REVISED VERSION

(19) World Intellectual Property Organization International Bureau





(43) International Publication Date 5 August 2004 (05.08.2004)

PCT

(10) International Publication Number WO 2004/064939 A1

(51) International Patent Classification7:

A63B 22/14

(21) International Application Number:

PCT/US2004/001415

(22) International Filing Date: 21 January 2004 (21.01.2004)

(25) Filing Language:

English

(26) Publication Language:

English

(30) Priority Data: 60/441,548

21 January 2003 (21.01.2003) US

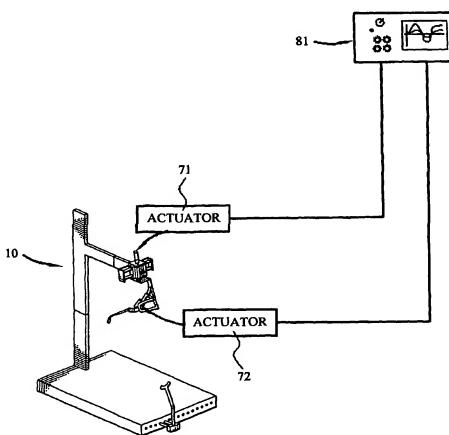
(71) Applicant and

(72) Inventor: MORAN, Thomas, F., Jr. [US/US]; 3005 Waterford Drive, Twinsburg, OH 44087 (US).

- (74) Agent: HILL, Stephen, A.; Rankin, Hill, Porter & Clark LLP, Suite 700, 925 Euclid Avenue, Cleveland, OH 44115-1405 (US).
- (81) Designated States (unless otherwise indicated, for every kind of national protection available): AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BW, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, EG, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NA, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW.
- (84) Designated States (unless otherwise indicated, for every kind of regional protection available): ARIPO (BW, GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW),

[Continued on next page]

(54) Title: TRAINING DEVICE FOR GOLF SWING AND SIMILAR MOTIONS



(57) Abstract: A training device (10) is disclosed for use in guiding and coordinating a user's body position when executing a golf swing like motion. The training device has a first actuator (71) for monitoring the movement of the upper torso of the user during the motion, and for applying a resistance force to the upper torso to guide the user in moving the upper torso in a desired manner. The training device also has a second actuator (72) for monitoring the movement of the wrists and arms, and for applying a resistance force to the wrists to guide the user in moving the wrists and arms in a desired manner. A control unit (81) is connected to the first and second actuators for recording the movement monitored by the actuators and for operating the actuators to apply the resistance forces.



Eurasian (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European (AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR), OAPI (BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG).

Published:

- with international search report
- (88) Date of publication of the supplementary international search report: 17 February 2005

(15) Information about Correction:

see PCT Gazette No. 07/2005 of 17 February 2005, Section II

For two-letter codes and other abbreviations, refer to the "Guidance Notes on Codes and Abbreviations" appearing at the beginning of each regular issue of the PCT Gazette.

INTERNATIONAL SEARCH REPORT

International application No.

PCT/US04/01415

A CLASSIDICATION OF SUBJECT MATTER					
A. CLASSIFICATION OF SUBJECT MATTER					
IPC(7) : A63B 22/14 US CL : 482/8					
According to International Patent Classification (IPC) or to both national classification and IPC					
B. FIELDS SEARCHED					
Minimum documentation searched (classification system followed by classification symbols)					
U.S. : 482/8					
· · · · · · · · · · · · · · · · · · ·					
Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched					
Documentation searched other than minimum documentation to the extent that such documents are included in the notes searched					
Therewise data have committed during the intermetical speech (name of data have and subara magazinable speech towns youd)					
Electronic data base consulted during the international search (name of data base and, where practicable, search terms used)					
C. DOCUMENTS CONSIDERED TO BE RELEVANT					
Category *	Citation of document, with indication, where appropriate, of the relevant passages			Relevant to claim No.	
A				1-24	
- -	The state of the s				
Α	US 6,174,270 B1 (DAGENAIS) 16 January 2001 (16.01.2001), See entire document. 1-24				
	000,17,1,27021 (211021122) 10001111111111111111111111111				
Α	US 6,186,910 B1 (KOBAYASHI) 13 February 2001 (13.02.2001), See entire document.			1-24	
			Ĺ	1	
İ					
]		
				ŀ	
				}	
				{	
)	
				1	
}					
	·				
					
Furthe:	r documents are listed in the continuation of Box C.	See pate	ent family annex.		
* Special categories of cited documents: "T" later document published after					
	a d C-landa d desa af the aut which is not appeldend to be			ation but cited to understand the	
"A" document defining the general state of the art which is not considered to be principle or theory underlying the invention of particular relevance					
"X" document of particul			nt of particular relevance; the		
"E" carlier a	pplication or patent published on or after the international filing date		ed novel or cannot be consider e document is taken alone	red to involve an inventive step	
"L" documen	t which may throw doubts on priority claim(s) or which is cited to				
	the publication date of another citation or other special reason (as		nt of particular relevance; the ted to involve an inventive step		
specified)			documents, such combination	
"O" document referring to an oral disclosure, use, exhibition or other means			ovious to a person skilled in the		
"P" documen	at published prior to the international filing date but later than the	"&" documen	nt member of the same patent	family	
priority date claimed					
Date of the actual completion of the international search Date of mailing of the international search report					
Date of the actual completion of the international search		Date of that it and	NOV 2004	ton tehott	
01 November	er 2004 (01.11.2004)	23 NOV 2004			
Name and mailing address of the ISA/US		Authorized officer			
Mail Stop PCT, Attn: ISA/US		Marin M. Presal 900			
Commissioner for Patents		Glenn Richman			
P.O. Box 1450 Alexandria, Virginia 22313-1450 Telepi			703 308 0858		
	Facsimile No. (703) 305-3230				